

## AMENDMENTS

### IN THE CLAIMS

Please amend claims 1, 5 and 15, as shown. A complete set of the claims, including their current status, is shown below.

1. (Currently amended) A method of activating an oocyte *in vitro*, the method comprising:

injecting contacting a non-activated oocyte with nitric oxide (NO), an a nitric oxide NO donor, nitric oxide synthase (NOS), or inducer of nitric oxide synthase NOS into a non- activated oocyte in an amount effective to activate said oocyte; and,

maintaining said oocyte until the oocyte has undergone at least one cell division,  
maintaining said oocyte until pronuclei have formed and migrated within the  
oocyte,

wherein said activation is performed in the absence of sperm ~~and wherein an oocyte~~  
~~that has undergone at least one cell division indicates that the oocyte is activated.~~

2. (Cancelled)

3. (Previously amended) The method according to claim 1, wherein said oocyte is a mammalian oocyte.

4. (Original) The method of claim 3, wherein said oocyte is a human oocyte.

5. (Currently amended) A method of inhibiting oocyte activation during fertilization *in vitro*, the method comprising:

injecting contacting a non-activated oocyte with a nitric oxide synthase inhibitor into a non-activated oocyte; and then

contacting said oocyte with sperm,

wherein said oocyte is inhibited from activation during fertilization *in vitro*.

13. (Previously amended) The method of claim 5, wherein said oocyte is a human oocyte.

15. (Currently amended) A method of activating an oocyte *in vitro*, the method comprising:

injecting ~~contacting a non-activated oocyte with~~ nitric oxide (NO), ~~an a nitric oxide~~ NO donor, nitric oxide synthase (NOS), or inducer of nitric oxide synthase NOS into a non-activated oocyte in an amount effective to activate said oocyte; and

maintaining said oocyte until pronuclei have formed and migrated within the oocyte.

~~contacting said activated oocyte with sperm to inseminate said oocyte; and~~  
~~maintaining said inseminated oocyte until the inseminated oocyte has undergone at least one cell division;~~

~~wherein an inseminated oocyte that has undergone at least one cell division indicates that the inseminated oocyte is activated.~~

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16-18. (Cancelled)

19. (New) The method of claim 1, wherein said injecting is microinjecting.

20. (New) The method of claim 5, wherein said injecting is microinjecting.

21. (New) The method of claim 15, wherein said injecting is microinjecting.

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